Mirror objective arrangement

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The invention is directed to a pancratic mirror objective system for laser focussing and especially for laser machining apparatus. The pancratic mirror objective system preferably includes a convex paraboloid mirror and an ellipsoid mirror. The ellipsoid mirror can be approximated by a toric or spherical form. The focus F1 of the paraboloid mirror P and the first focus of the ellipsoid mirror E are coincident. By rotating the ellipsoid mirror E about the axis parallel to the incident laser beam through the first focus F1, the effective image side aperture (for example K=4 to K=8) and the focal length are varied. The track control compensates for the movement of the focus F2 in laser machining apparatus.

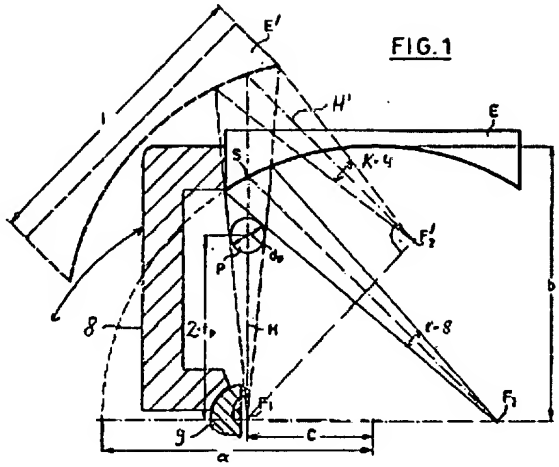

FIG.1